

IN THE CLAIMS:

Please amend Claims 1 and 5 as follows.

1. (Currently Amended) An image processing apparatus comprising:

image input means for inputting an image that includes a person's head;

photographing-position information input means for inputting photographing-position information of a camera that photographs the image, the photographing-position information being attached to the image input by the image input means, the photographing-position information input means being able to input four values, one of which is attached to the input image, the four values being a) a first value indicating that no significant photographing-position information is inputted, b) a second value indicating that an upright posture of the image is to be recognized as an upright position of the image, c) a third value indicating that a horizontally-oriented image with the person's head at the right is to be recognized as an upright position of the image, and d) a fourth value indicating that a horizontally-oriented image with the person's head at the left is to be recognized as an upright position of the image;

determination means for determining whether or not the image is photographed with the camera being rotated in a predetermined direction, with reference to the photographing-position information input by the photographing-position information input means;

face-detection angle-range information determination means for determining a first angle range used in a process of detecting a face from the input image when the value attached to the input image is the first value, a second angle range used in a process of detecting a face from the input image when the value attached to the input image is the second value, a third angle range used in a process of detecting a face from the input image when the value attached to the input image is the third value, and a fourth angle range used in a process of detecting a face from the input image when the value attached to the input image is the fourth value.

wherein the first, second, third, and fourth angle ranges are different from each other.

wherein the second angle range is greater than the first, third, and fourth angle ranges on the basis of an angle at which the camera is rotated; when the determination means determines that the image is photographed with the camera being rotated in the predetermined direction; and

process control means having a mode to control the execution of the face detecting process on the basis of the determined angle range information indicating the angle range determined by the face-detection angle-range information determination means.

2. (Original) The apparatus according to Claim 1, wherein the process control means controls the execution of the face detecting process in predetermined angle increments.

3. (Previously Presented) The apparatus according to Claim 1, further comprising:

image rotation means for rotating the input image,

wherein the process control means allows the image rotation means to rotate the input image in order to form images in predetermined angle increments, and performs the face detecting process to the respective images.

4. (Previously Presented) The apparatus according to Claim 1, further comprising:

reference data conversion means for converting face detection reference data used for face detection into reference data for a tilted face,

wherein the process control means allows the reference data conversion means to convert the face detection reference data into reference data for a tilted face in order to form tilted-face reference data in predetermined angle increments, and executes the face detecting process to the input image using the formed tilted-face reference data.

5. (Currently Amended) An image processing method comprising:

an image input step of inputting an image;

a photographing-position information input step for inputting photographing-position information of a camera that photographs the image, the photographing-position information being attached to the image input in the image input step, the photographing-position information

input step being able to input four values, one of which is attached to the input image, the four values being a) a first value indicating that no significant photographing-position information is inputted, b) a second value indicating that an upright posture of the image is to be recognized as an upright position of the image, c) a third value indicating that a horizontally-oriented image with the person's head at the right is to be recognized as an upright position of the image, and d) a fourth value indicating that a horizontally-oriented image with the person's head at the left is to be recognized as an upright position of the image;

a determination step for determining whether or not the image is photographed with the camera being rotated in a predetermined direction, with reference to the photographing-position information input by the photographing-position information input step;

a face-detection angle-range information determination step of determining a first angle range used in a process of detecting a face from the input image when the value attached to the input image is the first value, a second angle range used in a process of detecting a face from the input image when the value attached to the input image is the second value, a third angle range used in a process of detecting a face from the input image when the value attached to the input image is the third value, and a fourth angle range used in a process of detecting a face from the input image when the value attached to the input image is the fourth value,

wherein the first, second, third, and fourth angle ranges are different from each other,

wherein the second angle range is greater than the first, third, and fourth angle ranges on

the basis of an angle at which the camera is rotated, when the determination step determines that the image is photographed with the camera being rotated in the predetermined direction; and

a process control step having a mode to control the execution of the face detecting process on the basis of the determined information indicating the angle range determined in the face-detection angle-range information determination step.

6. (Original) The method according to Claim 5, wherein in the process control step, the execution of the face detecting process is controlled in predetermined angle increments.

7. (Previously Presented) The method according to Claim 5, further comprising:  
an image rotation step of rotating the input image,  
wherein in the process control step, images are formed in predetermined angle increments by rotating the input image in the image rotation step, and the face detecting process is performed to the respective formed images.

8. (Previously Presented) The method according to Claim 5, further comprising:  
a reference data conversion step of converting face detection reference data used for face detection into reference data for a tilted face,

wherein in the process control step, tilted-face reference data is formed in predetermined angle increments by converting the face detection reference data into reference data for a tilted face in the reference data conversion step, and the face detecting process is performed to the input image using the formed tilted-face reference data.

9. (Previously Presented) A computer-system executable program which is stored on a computer-readable medium and allows a computer system for executing the program to operate as the image processing apparatus according to Claim 1.

10. (Previously Presented) A computer-program storage medium in which a computer program is stored, the program realizing the image processing method according to Claim 5 and indicating operating procedures of steps included in the method.

11. (Previously Presented) A computer program which is stored on a computer-readable medium for realizing the image processing method according to Claim 5 and indicating operating procedures of steps included in the method.

12-15. (Cancelled)